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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/223,660	12/30/1998	WEI MING HU	237/117	1277

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EXAMINER

VO, TIM T

ART UNIT

PAPER NUMBER

2181

DATE MAILED: 05/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/223,660	Applicant(s) HU ET AL	
	Examiner Tim T. Vo	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- |   |  |
|---|--|
| 15) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 20) <input type="checkbox"/> Other: _____                                    |

## **Response to Amendment**

1. Applicants arguments filed March 5, 2002 have been fully considered but they are not deemed to be persuasive.
2. Amended 1, 12, 21, 22, 41, 52 and new claims 61-72 acknowledged. The amended phrase "in place" does not effect the scope of the claims. Therefore, previous office action remained rejected. New claims 61-72 see rejection below.

### **Part III DETAILED ACTION**

#### ***Notice to Applicant(s)***

This application has been examined. Claims 1-72 are pending.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tandon patent number 5,485,573 (Tandon) in view of Chung et al. patent number 6,195,760 (Chung) further in view of Randell et al. patent number 4,164,017 (Randell).
4. As for claims 1, 12, 21, 22, 41 and 52, Tandon teaches a method of diagnosing a computer system after a failure (see fig 2, 6 and col 1 lines 20-25 of the specification), comprising:

Tandon teaches a system having multiple processors executing application programs such as data base management systems (DBMS) (see figure 1 elements 10, 24). Error occurs while the DBMS is operating on a host processor, the host processor saved the data for later analysis. Meanwhile, the other host processors will continue to process transactions (see column 2 lines 3-8).

diagnosing failure by analyzing one or more resources from the first set of system resource (see column 2 lines 3-5 of the specification);

Tandon does not expressly teaches accessing the computer system by utilizing a second set of system resource. However, Chung teaches such teaching that is when a primary computer is indicated failure then a backup computer becomes a primary (see abstract and col 1 lines 36-67 of the specification).

Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Chung into the teachings of Tandon because Chung provides Tandon a backup system which is found reliable system, thereby it saves the cost for computer downtime (see col 1 lines 33-35 of Chung).

Tandon and Chung do not expressly teach preserving in place the state of a first set of system resources after the failure occurs in the computer system. However, Rendall teaches a method for recovery from a failure with a block of a computer program (as admitted by the applicant from the paper 8). Further, Rendall teaches preserving the state of each item of information after error occurs (see column 1 lines 47-50 of Rendall). It would have been obvious to include such teaching preserving the

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state of a computer system after the failure occurs into the system of Tandon and Chung to diagnose and analyze the reason for failure and thereby preventing errors in future.

As for claims 2, 13, 23, 33, 42, and 53, Tandon teaches maintaining one or more lists of the first set of system resources (see col 2 lines 40-43 of the specification).

As for claims 3, 14, 24, 34, 43 and 54, Tandon teaches one or more data lists a linked lists (see fig 1 elements 10 and col 3 lines 20-38 of the specification).

As for claims 4, 15, 25, 35, 44, and 55, Tandon teaches first set of system resources comprise processing entities (see fig 1 element 24 and fig 2 of the specification).

As for claims 5, 16, 26, 36, 45 and 56, Tandon teaches in which the processing entities comprises processes which are categorized into process types (see fig 2 steps 54-68 of the specification).

As for claims 6, 17, 27, 37, 46 and 57, Tandon teaches suspending the state of one or more of the processes in the first set of system resources (see col 6 lines 63-67 of the specification).

As for claims 7, 18, 28, 38, 47 and 58, Tandon teaches one or more processes to suspend are suspended by being entered into an idle loop (see col 4 lines 2-10 of the specification).

As for claims 8-9, 19, 29-30, 39, 48-49 and 59, Tandon teaches one or more processes to suspend are suspended by an operating system scheduler and selected based upon their process type (see col 6 lines 63-67 and fig 5 of the specification).

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As for claims 10, 20, 31, 40, 50 and 60, Tandon teaches system resources that have been set aside for diagnostic purpose (see col 2 lines 3-5 of the specification).

As for claims 11, 32 and 51, Tandon teaches system resources comprises redundant hardware/software components (see col 3 lines 50-59 of the specification).

As for claims 61, 63, 65, 67, 69 and 71, they are rejected as applied above independent claims. Further, Rendell teaches preserving states.

As for claims 62, 64, 66, 68, 70 and 72, Tandon teaches a host saved data for later analysis thus does not require any copying of the state of the first set of system resources (see column 2 lines 3-5 of the specification).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Tim Vo, whose telephone number is (703) 308-5862. The examiner can normally be reached on Monday-Friday from 7:00AM- 3:30PM.

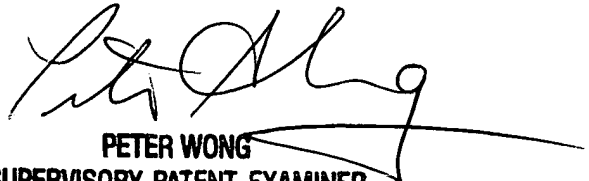
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Peter Wong*, can be reached on (703) 305-3477 or via e-mail addressed to [*peter.wong@uspto.gov*]. The fax number for this Group is (703) 308-5358.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [*tim.vo@uspto.gov*].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

***Tim Vo***  
***5/2/02***

  
**PETER WONG**  
**SUPERVISORY PATENT EXAMINER**  
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